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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/626,733

07/25/2003

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1713.1005

9687

21171 7590 03/04/2009
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EXAMINER

DANG, DUY M

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

03/04/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/626,733	Applicant(s) FUJITA ET AL.	
	Examiner Duy M. Dang	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 8-17, 19, 20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) 5-7, 18 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-17, 19, 20 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/25/2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 18, 2008 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-4, 8-17, 19-20, and 22 filed on November 18, 2008, have been considered.

3. It is noted that claims 19-20 were amended to include "a computer readable storage program" (see line 1 of claims 19-20) in attempting to overcome the 101 rejection. However, the scope of claims 19-20 are directed to "program" which is not stored/encoded/recorded on "a computer readable medium" and thus the examiner maintains the rejection in this Office action.

4. Applicant's arguments with regard to the object to drawings and specification and claim rejection under 35 USC 112(1) as set forth at page 9 paragraph 3 of the response are persuasive and thus such objections and rejection have been withdrawn.

5. Applicant's arguments with regard to the rejections of claims 1, 4, 8-9, 11-13, 15-17, 19-20 and 22 under 35 USC 103 have been fully considered but they are not persuasive.

Specifically, Applicant argues that "Odryna, Thomas and Pinkston do not discuss compression and thus are not particularly relevant to claim 1 that calls for compression along with the bypass circuit," see last two lines of page 9 of the response. However, the examiner

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respectively disagree. For example, Odryna teaches video compression (see encoding RGB in paragraph [0049], for example) and bypass keyboard and mouse signals at paragraphs (see paragraph [0052]: keyboard and mouse signals are passed through between remote user and server 122 and video signal is encoded by RIC 90 or RIP 70 (raising or lowering common mode voltage on the video is also referred to encoding/compressing video according to last 5 lines of paragraph [0049])).

Applicant further argues that Perholtz does not teach network, but direct lines or a modem link, see page 10. Applicant is reminded that network does also include direct lines and/or modem link. Since the claimed language does not require that claimed network does not include direct lines and/or modem link, Perholtz does meet the claimed invention with reasonably interpretation.

Claim Rejections - 35 USC § 101

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 19-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Currently, each of claims 19-20 defines a computer program embodying functional descriptive material. However, the claim does not define a “computer-readable medium or computer-readable memory” and is thus non-statutory for that reason (i.e., “When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of

technology permits the function of the descriptive material to be realized” – Guidelines Annex

IV. Also see Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759; Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035; and MPEP 2106.01.

Claim Rejections - 35 USC § 103

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 1, 4, 8-9, 11-13, 15-17, 19-20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biederman (USPN 7,069,342, referred as Biederman hereinafter).

Regarding claim 1 as a representative claim, Biederman teaches a switching device that selectively switches connections to a predetermined terminal among a plurality of terminals connected to computers, and can be remote-controlled over a network, the switching device (see figure 2 and col. 2 lines 24-55) comprising: a network interface circuit to be connected to the network (i.e., interface 68 of figure 1); and an image processing unit that includes an image compression circuit for compressing image signals outputted from the computers (see compression units depicted at 204 in figure 2); a controller that changes a compression method or compression rate to be used at the image compression circuit, in accordance with a congestion level of the network (see selector 202, controller 210, and estimator 212 of figure 2).

Biederman does not teach limitations of “a circuit causes keyboard signals and mouse signals supplied via the network to said selected terminal to bypass the image compression circuit, such that the keyboard and mouse signals are not compressed, while the image signals supplied from the selected terminal to be sent to the network are compressed by the image compression circuit” as recited at last four lines.

However, such limitations are well known in the art (Official Notice) in order to allow multiple computers/server to be controlled/managed by remote user(s). It also reduces space and the number keyboards and mouse installed/used in the rack/blade server type environments.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate such well known features in combination with Beiderman for that reasons.

The supporting evidences to the Examiner's taken Official Notice are presented hereinafter:

(i)Odryna et al. (US Publication No. 2002/0143996, referred as Odryna hereinafter). Odryna teaches bypassing/redirecting/passing keyboard and mouse signals from remote user via network to a selected network server wherein said signals are not compressed (i.e., keyboard K and mouse M signals are bypassed or redirected to the selected server according to paragraphs [0049]-[0052]. Specifically, at paragraph [0049], KM signals from remote user 112 are redirected to a selected network server 122; at paragraph [0052], remote user's K, M strokes are passed to a selected server 122. This implies that KM signals in Odryna are not compressed);

(ii)Thomas et al. (USPN 6,681,250, referred as Thomas hereinafter). Thomas teaches a KVM switch (see abstract, figure 2, converters of figures 3-5 and 7-10 (note that converter is also referred to KVM switch according to col. 4 lines 34-36), and server card 36 of figure 6 (note that server card is referred as converter according to col. 3 lines 8-12)) comprising bypassing/redirecting/passing keyboard and mouse signals from remote user to a selected network server (i.e., port 39 of figure 6, port 46 of figure 7, and 102 of figure 10; col. 4 line 65 to col. 5 line 21; the converters 32 and 47 described at col. 6 line 1 to col. 7 line 15; server card 36

described at col. 7 lines 45-67; and converter described at col. 8 lines 9-61. Specifically, the keyboard and mouse signals in Thomas are packetized/converted and redirected/bypassed to the intended server from the a workstation 25-27. This implies that Thomas' converter does not compress keyboard and mouse signals);

(iii)Pinkston, II et al. (USPN 6,378,009, referred as Pinkston hereinafter). Pinkston teaches a KVM switch (see 100 of figure 1, 200 of figure 2, "peripherals" in figure 3) comprising bypassing/redirecting/passing keyboard and mouse signals from remote user via network to a selected network server wherein said signals are not compressed (i.e., the communication bus is used to transfer/bypass/redirect keyboard and mouse signals from user station to his/her selected computer according to col. 3 lines 1-13; and keyboard and mouse signals/information are directed to selected connection described at col. 5 lines 38-57 together with figures 5 and 9);

(iv)Coleman (US Pub. No. 2004/0042547, referred as Coleman hereinafter). Coleman teaches a KVM switch (see compression 103 of figure 1A in together with paragraphs [0115]-[0116]; note that compress 103 directs keyboard and mouse data from computer 111 to remote computer 101 to allow computer 111 to control remote computer 101 and said data is not compressed according to paragraph [0016]; also refer to KVM 129 of figure 1B and paragraph [0117]); and

(v)Perholtz et al. (USPN 5,732,212, referred as Perholtz hereinafter). Perholtz teaches a circuit that bypasses keyboard and mouse signals, supplied via the network to said selected terminal, such that the keyboard and mouse signals are not compressed (see keyboard circuitry 101 and mouse circuitry 117 of figure 4A and detailed on figure 4B in together with col. 19 lines 1-6, col. 19 line 33 to col. 20 line 11).

Regarding claims 8-9, 12-13, 15-17, 19-20, and 22 are also rejected for the same reasons as set forth in claim 1 above.

Regarding claims 4, and 11, the rejection applied to claim 1 above is incorporated herein.

10. Claims 2-3, 10, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biederman as applied to claims 1, 4, 8-9, 11-13, 15-17, 19-20, and 22 above in view of Kilkki.

The advanced statements as applied to claims 1, 4, 8-9, 11-13, 15-17, 19-20, and 22 above are incorporated herein.

Regarding claim 2, Biederman does not explicitly teaches packet filtering circuit that adds up a packet data amount received through the network interface circuit. However, such claimed features are taught in Kilkki as pointed out in the previous Office action and incorporated herein. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporated such features as taught by Kilkki in combination with Biederman. The motivation for doing so is to improve the accuracy in computation the congestion level in order to enhance the routing data.

Regarding claim 3, Kilkki teaches a plurality of image processing units and a plurality of remote-control computers that can be connected to the network, the number of the image processing units being the same as the number of remote-control computers (see figures 1 and 17).

Regarding claims 10 and 14, the quality based operation mode and quantity based operation mode shown at figure 2 and paragraph [0012] of Kilkki refer to the claimed features. Also refer to figure 2 of Biederman which comprises a plurality of compression units.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy M. Dang whose telephone number is 571-272-7389. The examiner can normally be reached on Monday to Friday from 6:00AM to 2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh M. Mehta can be reached on 571-272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

dmd
1/09

/Duy M Dang/
Primary Examiner, Art Unit 2624